



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

April 7, 2015

Beth Anderson
Regulatory Affairs Manager
Arysta LifeScience North America, LLC
15401 Weston Parkway, Suite 150
Cary, NC 27513

Subject: Label Notification per PRN 2007-4 and PRN 98-10– Change in Storage and Disposal Language and Other Minor Changes
Product Name: ARY-0484-101
EPA Registration Number: 66330-421
Application Date: February 19, 2015
Decision Number: 501375

Dear Ms. Anderson:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 2007-4 for the above referenced product. The Registration Division (RD) has conducted a review of this request for its applicability under PRN 2007-4 and PRN 98-10, and finds that the action requested falls within the scope of PRN 2007-4 and PRN 98-10.

The label submitted with the application has been stamped “Notification” and will be placed in our records.

Please be reminded that 40 CFR Part 156.140(a)(4) requires that a batch code, lot number, or other code identifying the batch of the pesticide distributed and sold be placed on non-refillable containers. The code may appear either on the label (and can be added by non-notification via PR Notice 98-10) or durably marked on the container itself.

If you have any questions, please contact Deirdre Sunderland at (703) 603-0851 or by email at sunderland.deirdre@epa.gov.

Sincerely,

A handwritten signature in black ink, reading "Kathryn V. Montague", is positioned above the typed name.

Kathryn Montague, Product Manager 23
Branch Name
Registration Division (7505P)
Office of Pesticide Programs

NOTIFICATION

66330-421

The applicant has certified that no changes, other than those reported to the Agency have been made to the labeling. The Agency acknowledges this notification by letter dated:

04/07/2015

ARY-0484-101

DICAMBA
AGRICULTURAL HERBICIDE

For weed control in corn, sorghum, small grains, pasture, hay, rangeland, general farmstead (non-cropland), rights-of-way, public utility and industrial areas, fallow, sugarcane, asparagus, turf, and grass seed crops.

ACTIVE INGREDIENT:

Dimethylamine salt of dicamba (3, 6-dichloro-o-anisic acid)*.....49.77%

OTHER INGREDIENTS:.....50.23%

Total.....100.0%

* This product contains 41.35% 3, 6 –dichloro-o-anisic acid (dicamba) or 4 pounds per gallon (480 g/L).

KEEP OUT OF REACH OF CHILDREN

CAUTION/PRECAUCIÓN

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

See inside of booklet for additional Directions for Use and Precautionary Statements.

FIRST AID

If swallowed	<ul style="list-style-type: none">• Call a poison control center or doctor immediately for treatment advice.• Have person sip a glass of water if able to swallow.• Do not induce vomiting unless told to do so by a poison control center or doctor.• Do not give anything to an unconscious person.
If inhaled	<ul style="list-style-type: none">• Remove person to fresh air.• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.• Call a poison control center or doctor for further treatment advice.
If on skin or clothing	<ul style="list-style-type: none">• Take off contaminated clothing.• Rinse skin immediately with plenty of water for 15-20 minutes.• Call a poison control center or doctor for treatment advice.
If in eyes	<ul style="list-style-type: none">• Hold eye open and rinse slowly and gently with water for 15-20 minutes.• Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye.• Call a poison control center or doctor for treatment advice.

HOT LINE NUMBER

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

FOR 24-HOUR EMERGENCY MEDICAL ASSISTANCE CALL PROSAR: 1-866-303-6952 or 1-651-603-3432.

FOR 24-HOUR CHEMICAL EMERGENCY: (Spill, leaks, fire, exposure, or accident) CALL CHEMTREC: 1-800-424-9300 or 1-703-527-3887.

Formatted: Spanish (Latin America)

EPA Reg. No. 66330-421

EPA Est. No. _____

AD052114

Produced for:

Arysta LifeScience North America, LLC

15401 Weston Parkway, Suite 150

Cary, NC 27513

NET CONTENTS:_____

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION: Harmful if swallowed. Harmful if absorbed through skin. Avoid contact with skin, eyes, or clothing.

Personal Protective Equipment (PPE)

Some materials that are chemical-resistant to this product are butyl rubber and nitrile rubber. If you want more options, follow the instructions for **Category A** on an EPA chemical-resistance category selection chart.

All mixers, loaders, and applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks
- Chemical-resistant gloves (except for applicators using groundboom equipment, pilots and flaggers)
- Protective eyewear

See engineering controls for additional requirements and exceptions.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. **DO NOT** reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

ENGINEERING CONTROLS STATEMENTS

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

Pilots must use cockpits in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR 170.240(d)(4-6)).

User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

DO NOT apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. **DO NOT** contaminate water when disposing of equipment washwaters or rinsate. Apply this product only as directed on label.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

For any requirements specific to your State or tribe, consult the Agency responsible for pesticide regulation.

DO NOT apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

DO NOT enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls worn over short-sleeve shirt and short pants
- Chemical-resistant footwear plus socks
- Chemical-resistant gloves made of any waterproof material
- Chemical-resistant headgear for overhead exposure
- Protective eyewear

Notify workers of the application by warning them orally and by posting warning signs at entrances to treated areas.

Non-Agricultural Use Requirements

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, nurseries, or greenhouses.

DO NOT enter or allow others to enter the treated area until sprays have dried.

Before applying **ARY-0484-101** read all directions and precautions appearing on the container label and in this booklet. Failure to follow all directions and precautions may result in unsatisfactory weed control, crop injury, or illegal residues.

INFORMATION

The following directions apply to all uses of **ARY-0484-101**. Additional precautions and restrictions will be found in each specific use section.

DO NOT treat irrigation ditches or water used for crop irrigation or domestic uses.

DO NOT apply this product through any type of irrigation system.

MIXING AND APPLICATION

UNLESS OTHERWISE SPECIFIED UNDER THE INDIVIDUAL USE HEADINGS OF THIS BOOKLET, THE FOLLOWING DIRECTIONS APPLY TO ALL CROP AND NON-CROP USES OF **ARY-0484-101**. REFER TO INDIVIDUAL USE SECTIONS FOR ADDITIONAL PRECAUTIONS, RESTRICTIONS, APPLICATION RATES, AND TIMINGS.

ARY-0484-101 is a water-soluble formulation that can be applied using water or sprayable fluid fertilizer as the carrier. If a fluid fertilizer is to be used, a compatibility test (see COMPATIBILITY TEST) should be made prior to tank mixing.

Ground or aerial application equipment which will give good spray coverage of weed foliage should be used. HOWEVER, **DO NOT** USE AERIAL APPLICATION EQUIPMENT IF SPRAY PARTICLES CAN BE CARRIED BY WIND INTO AREAS WHERE SENSITIVE CROPS OR PLANTS ARE GROWING OR WHEN TEMPERATURE INVERSIONS EXIST.

Apply 3 to 50 gal of diluted spray per treated acre when using ground application equipment or 1 to 10 gal of diluted spray per treated acre (2 to 20 gal of diluted spray per treated acre for preharvest uses) in a

water-based carrier when using aerial application equipment. Use the higher level of the listed spray volumes when treating dense or tall vegetation. Use coarse sprays.

Select nozzles designed to produce minimal amounts of fine spray particles. Spray with nozzles as close to the weeds as is practical for good weed coverage.

To avoid uneven spray coverage, **ARY-0484-101** should not be applied during periods of gusty wind or when wind is in excess of 15 mph.

Avoid disturbing (e.g., cultivating or mowing) treated areas for at least 7 days following application.

BEST STEWARDSHIP PRACTICES

ARY-0484-101 provides effective broadleaf weed and brush control when properly applied. Best stewardship practices in all mixing, loading, and application operations not only maximize weed control, but also protect ground and surface waters and minimize off-target movement.

This chemical is known to leach through soil into ground water under certain conditions as a result of agricultural use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground-water contamination.

GROUND AND SURFACE WATERS PROTECTION

1) Point source contamination – To prevent point source contamination, **DO NOT** mix, or load this pesticide product within 50 feet of wells (including abandoned wells and drainage wells), sink holes, perennial or intermittent streams and rivers, and natural or impounded lakes and reservoirs. **DO NOT** apply pesticide product within 50 feet of wells. This setback does not apply to properly capped or plugged abandoned wells according to state and local requirements and does not apply to impervious pad or properly diked mixing/loading areas as described in this section.

Mixing, loading, rinsing, or washing operations performed within 50 feet of a well are allowed only when conducted on an impervious pad constructed to withstand the weight of the heaviest load that may be on or moved across the pad. The pad must be self-contained to prevent surface water flow over or from the pad. The pad capacity must be maintained at 110% that of the largest pesticide container or application equipment used on the pad and have sufficient capacity to contain all product spills, equipment or container leaks, equipment wash waters, and rainwater that may fall on the pad. The containment capacity does not apply to vehicles delivering pesticide shipments to the mixing/loading site. States may have in effect additional requirements regarding wellhead setbacks and operational containment.

Care must be taken when using this product to prevent: a) back siphoning into wells, b) spills or c) improper disposal of excess pesticide, spray mixtures or rinsates. Check valves or antisiphoning devices must be used on all mixing equipment.

2) Movement by surface runoff of through soil – **DO NOT** apply under conditions which favor runoff. **DO NOT** apply to impervious substrates such as paved or highly compacted surfaces in areas with high potential for ground water contamination. Ground water contamination may occur in areas where soils are permeable or coarse and ground water is near the surface. **DO NOT** apply to soils classified as sand with less than 3% organic matter and where ground water depth is shallow. To minimize the possibility of ground water contamination, carefully follow specified application rates as affected by soil type in the *INFORMATION* section of this label.

3) Movement by water erosion of treated soil – **DO NOT** apply or incorporate this product through any type of irrigation equipment nor by flood or furrow irrigation. Ensure treated areas have received at least one-half inch rainfall (or irrigation) before using tailwater for subsequent irrigation of other fields.

SENSITIVE CROP PRECAUTIONS

ARY-0484-101 may cause injury to desirable trees and plants, particularly beans, cotton, flowers, fruit trees, grapes, ornamentals, peas, potatoes, soybeans, sunflowers, tobacco, tomatoes, and other broadleaf plants when contacting their roots, stems, or foliage. These plants are most sensitive to **ARY-0484-101** during their development or growing stage.

Deleted: below

FOLLOW THE PRECAUTIONS LISTED ON THIS LABEL WHEN USING **ARY-0484-101**

- **DO NOT** treat areas where either possible downward movement into the soil or surface washing may cause contact of **ARY-0484-101** with the roots of desirable plants such as trees and shrubs.
- Avoid making applications when spray particles may be carried by air currents to areas where sensitive crops and plants are growing or when temperature inversions exist. **DO NOT** spray near sensitive plants if wind is gusty or in excess of 5 mph and moving in the direction of adjacent sensitive crops. Leave an adequate buffer zone between area to be treated and sensitive plants. Coarse sprays are less likely to drift out of the target area than fine sprays.
- Use coarse sprays to avoid potential herbicide drift. Select nozzles which are designed to produce minimal amounts of fine spray particles. Examples of nozzles designed to produce coarse sprays via ground applications are Delavan Raindrops, Spraying Systems XR flat fans, or large capacity flood nozzles such as D10, TK10, or greater capacity tips. Keep the spray pressure at or below 20 psi and the spray volume at or above 20 gpa, unless otherwise required by the manufacturer of drift-reducing nozzles. Consult with your spray nozzle supplier concerning the choice of drift-reducing nozzles.
- Agriculturally approved drift-reducing additives may be used.
- **DO NOT** apply **ARY-0484-101** adjacent to sensitive crops when the temperature on the day of application is expected to exceed 85° F as injury is more likely to occur.
- To avoid injury to desirable plants, equipment used to apply **ARY-0484-101** should be thoroughly cleaned (see *PROCEDURE FOR CLEANING SPRAY EQUIPMENT*) before reusing to apply any other chemicals.

All crop uses of **ARY-0484-101** are intended for a normal growing interval between planting and harvest. No crop rotation restrictions exist if normal harvest of treated crop has occurred. If this interval is shortened, such as in cover crops that will be plowed under, do not follow up with the planting of a sensitive crop.

Crops growing under stress conditions such as drought, poor fertility, or foliar damage due to hail, wind, or insects, can exhibit various injury symptoms that may be more pronounced if herbicides are applied.

Consult your local or state authorities for possible application restrictions and advice concerning these and other special local use situations. **Tank mix recommendations are for use only in states where the tank mix product and application site are registered.**

BAND TREATMENTS

ARY-0484-101 may be applied as a band treatment. Use the following formulas to determine the appropriate rate and volume per treated acre.

$$\begin{array}{lclcl} \frac{\text{Band width in inches}}{\text{Row width in inches}} & \times & \text{Broadcast RATE} & = & \text{Band RATE} \\ & & \text{treated acre} & & \text{per treated acre} \\ \\ \frac{\text{Band width in inches}}{\text{Row width in inches}} & \times & \text{Broadcast VOLUME} & = & \text{Band VOLUME} \\ & & \text{per treated acre} & & \text{per treated acre} \end{array}$$

COMPATIBILITY TEST

Before mixing in the spray tank, it is advisable to test compatibility by mixing all components in a small container in proportionate quantities (see following table).

Amount of Herbicide to Add to One Pint of Spray Carrier (Assuming volume is 25 gal per Acre)

HERBICIDE FORMULATIONS	RATE PER ACRE	LEVEL TEASPOONS
DRY	1 lb	1 1/2
LIQUID	1 pt	1/2

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If herbicide(s) do not ball-up or form flakes, sludge, gels, oily films or layers, or other precipitates, then the tested spray mix is compatible. Usually, incompatibility in any of the ~~previously~~ described forms will occur within 5 minutes after mixing.

If components are incompatible, the use of a compatibility agent is recommended. Rerun the COMPATIBILITY TEST with a suitable compatibility agent (1/4 teaspoon is equivalent to 2 pints per 100 gal of fluid fertilizer).

PROCEDURE FOR CLEANING SPRAY EQUIPMENT

~~Steps 1 through 4~~ are suggested for thorough cleaning of spray equipment following applications of **ARY-0484-101** or tank mixes of **ARY-0484-101** or tank mixes of **ARY-0484-101** plus 2,4-D amine.

- 1) Hose down thoroughly the inside as well as outside surfaces of equipment while filling the spray tank half full of water. Flush by operating sprayer until the system is purged of the rinse water.
- 2) Fill tank with water while adding 1 quart of household ammonia for every 25 gal of water. Operate the pump to circulate the ammonia solution through the sprayer system for 15 to 20 minutes and discharge a small amount of the ammonia solution through the boom and nozzles. Let the solution stand for several hours, preferably overnight.
- 3) Flush the solution out of the spray tank through the boom.
- 4) Remove the nozzles and screens and flush the system with two full tanks of water.

~~Steps 5 through 8~~ are suggested for thorough cleaning of spray equipment used to apply **ARY-0484-101** as a tank mix with wettable powders (WP), emulsifiable concentrates (EC), or other types of water-dispersible formulations. **ARY-0484-101** tank mixes with water-dispersible formulations require the use of a water/detergent rinse.

- 5) Complete step 1.
- 6) Fill tank with water while adding 2 lb of detergent for every 40 gal of water. Operate the pump to circulate the detergent solution through the sprayer system for 5 to 10 minutes and discharge a small amount of the solution through the boom and nozzles. Let the solution stand for several hours, preferably overnight.
- 7) Flush the detergent solution out of the spray tank through the boom.
- 8) Repeat step 1, and follow with steps 2, 3, and 4.

WEED LIST

This is a list of weeds which may be treated with **ARY-0484-101** in accordance with this label as specified under the RATES AND TIMING sections of the individual Use headings. Proper usage of this product will give control or growth suppression of many ANNUAL, BIENNIAL, and PERENNIAL broadleaf weeds, and many WOODY brush and vine species including:

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ANNUALS		
Amaranth, Spiny (Spiny Pigweed)	Ladysthumb	Radish, Wild
Aster, Slender	Lambsquarters, Common	Ragweed, Common
Bedstraw	Lambsquarters (triazine resistant)	Ragweed, Giant (Buffaloweed)
Beggarweed, Florida	Lettuce, Prickly	Ragweed, Lance-Leaf
Broomweed, Common	Mallow, Common	Rubberweed, Bitter (Bitterweed)
Buckwheat, Wild	Mallow, Venice	Sesbania, Hemp
Buffalobur	Mayweed	Shepherdspurse
Burclover, California	Morningglory, Ivyleaf	Sicklepod
Burcucumber	Morningglory, Tall	Sida, Prickly (Teaweed)
Buttercup, Roughseed	Mustard, Tansy	Smartweed, Green
Carpetweed	Mustard, Wild	Smartweed, Pennsylvania
Catchfly, Nightflowering	Mustard (Yellowtops)	Sneezeweed, Bitter
Chamomile, Corn	Nightshade, Black	Sowthistle, Annual
Chickweed, Common	Pennycress, Field (Fanweed)	Sowthistle, Spiny
Clovers (Annual)	Frenchweed, Stinkweed)	Spikeweed, Common
Cockle, Corn	Pepperweed, Virginia	Spurge, Prostrate
Cockle, Cow	(Peppergrass)	Spurry, Corn
Cocklebur, Common	Pigweed, Prostrate	Starbur, Bristly
Croton, Tropic	Pigweed, Redroot	Sumpweed, Rough
Croton, Woolly	(Carelessweed)	Sunflower, Common (Wild)
Daisy, English	Pigweed, Rough	Sunflower, Volunteer
Evening Primrose, Cutleaf	Pigweed, Smooth	Thistle, Russian
Fleabane, Annual	Pigweed (triazine resistant)	Velvetleaf
Goosefoot, Nettleleaf	Pigweed, Tumble	Waterhemp
Henbit	Poorjoe	Waterprimrose, Winged
Jimsonweed	Puncturevine	Wormwood, Annual
Knotweed	Purslane, Common	
Kochia	Pusley, Florida	

Commented [WA13]: Reformatted weed tables.

BIENNIALS		
Burdock, Common	Knapweed, Diffuse	Sweetclover
Carrot, Wild (Queen Anne's Lace)	Knapweed, Spotted	Teasel
Cockle, White	Mallow, Dwarf	Thistle, Bull
Evening Primrose, Common	Plantain, Bracted	Thistle, Milk
Geranium, Carolina	Ragwort, Tansy	Thistle, Musk
Gromwell	Starthistle, Yellow	Thistle, Plumeless

PERENNIALS		
* Alfalfa	Goldenweed, Common	Spurge, Leafy
Artichoke, Jerusalem	Hawkweed	Sundrop, Halfshrub
Aster, Spiny	Horsenettle, Carolina	(Evening Primrose)
Aster, Whiteheath	Ironweed	Thistle, Canada
Beadstraw, Smooth	Knapweed, Black	Toadflex, Dalmation
Bindweed, Field	Knapweed, Russian	Tropical Soda Apple
Bindweed, Hedge	Mare's Tail (Horseweed)	Trumpet creeper (Buckvine)
Blueweed, Texas	Milkweed, Climbing	Vetch
* Bursage (Bur Ragweed)	Milkweed, Common	Waterhemlock
Lakewood, Povertyweed)	Milkweed, Honeyvine	Waterprimrose, Creeping
Bursage, Woollyleaf (Lakewood)	Milkweed, Western Whorled	* Woodsorrel, Creeping
Buttercup, Tall	Nettle, Stinging	Common Yellow
Campion, Bladder	Nightshade, Silverleaf	Wormwood, Common
Chickweed, Field	(White Horsenettle)	Wormwood, Louisiana
Chickweed (Mouseear, Canada)	Onion, Wild	* Yankeeweed
Chicory	* Plantain, Broadleaf	Yarrow, Common
* Clover, Hop	Plantain, Buckhorn	
* Dandelion, Common	Pokeweed	
* Dock, Broadleaf (Bitterdock)	Ragweed, Western	
* Dock, Curly	Redvine	
Dogbane, Hemp	Sericia Lespedeza	
* Dogfennel (Cypressweed)	Smartweed, Swamp	
Fern, Bracken	Snakeweed, Broom	
Garlic, Wild	* Sorrel, Red (Sheep Sorrel)	
Goldenrod, Canada	Sowthistle	
Goldenrod, Missouri	Sowthistle, Perennial	

*Noted perennials may be controlled using **ARY-0484-101** at rates lower than those directed for other listed perennial weeds. (See *APPLICATION RATES AND TIMING* sections in this label.)

WOODY		
Alder	* Hawthorn (Thornapple)	* Plum, Sand (Wild Plum)
Ash	Hemlock	Rabbitbrush
Aspen	Hickory	* Redcedar, Eastern
Basswood	Honeylocust	* Rose, McCartney
Beech	Honeysuckle	* Rose, Multiflora
Birch	Hornbeam	Sagebrush, Fringe
* Blackberry	Huckleberry	Sassafras
* Blackgum	Huisache	Serviceberry
* Cedar	Ivy, Poison	Spicebush
Cherry	Kudzu	Spruce
Chinquapin	Locust, Black	Sumac
Cottonwood	Maple	* Sweetgum
* Creosotebush	Mesquite	Sycamore
Cucumbertree	Oak	Tarbrush
* Dewberry	Oak, Poison	Willow
* Dogwood	Olive, Russian	Witchhazel
Elm	Persimmon, Eastern	* Yaupon
Grape	Pine	* Yucca

* Growth Suppression

FIELD, SEED*, POPCORN*, AND SILAGE CORN

Observe all PRECAUTIONS and read and follow MIXING, APPLICATION and CLEANING instructions as well as the following:

*Do not apply **ARY-0484-101** to seed corn or popcorn without first verifying with your local seed corn company (supplier) the **ARY-0484-101** selectively on your inbred line or variety of popcorn. This precaution will help avoid potential injury of sensitive varieties.

ARY-0484-101 is not registered for use on sweet corn.

Direct contact of **ARY-0484-101** with corn seed must be avoided. If corn seeds are less than 1 1/2 inches below the surface, delay application until corn has emerged.

Up to 2 applications of **ARY-0484-101** may be made during a growing season. **DO NOT** exceed a total of 1 1/2 pt of **ARY-0484-101** per treated acre per crop year. Allow two weeks or more between applications of **ARY-0484-101**. See appropriate section for rate information. For combination options or sequential treatments, refer to appropriate section.

Applications of **ARY-0484-101** to corn during periods of rapid growth may result in temporary leaning. Corn will usually become erect within 3 to 7 days. Cultivation should be delayed until after corn is growing normally to avoid breakage.

Agriculturally approved surfactants or sprayable fertilizers (1/2 to 1 gal per acre of 28%, 30%, or 32% urea ammonium nitrate or 2.5 lb per acre spray grade ammonium sulfate) may be added to the spray mixture to improve postemergence weed control, particularly in dry growing conditions.

Do not use adjuvants containing penetrants such as petroleum-based oils after crop emergence or crop injury may result.

Corn may be harvested or grazed for feed once the crop has reached the ensilage (milk) stage or later in maturity.

Several synthetic pyrethroid insecticides are labeled for tank mix applications of **ARY-0484-101**. Refer to their label for specific recommendations.

*Not for use in California

WEEDS CONTROLLED

ARY-0484-101 will control many ANNUAL broadleaf weeds or give growth suppression of many PERENNIAL broadleaf weeds commonly found in corn.
(Refer to the WEED LIST).

For best performance, make application when weeds have emerged and are actively growing.

Preemergence control of cocklebur, velvetleaf, and jimsonweed may be reduced if conditions such as low temperature or lack of soil moisture cause delayed or deep germination of weeds.

PREPLANT/PREEMERGENCE IN NO-TILLAGE CORN

Applications of **ARY-0484-101** may be made before, during, or after planting to emerged and actively growing broadleaf weeds. Apply **ARY-0484-101** at 1 pt per treated acre on medium or fine textured soils containing 2% or greater organic matter. Use 1/2 pt per treated acre on coarse textured soils (sand, sandy loam, and loamy sand) or medium and fine textured soils with less than 2% organic matter.

When planting into a legume sod (e.g., alfalfa or clover), apply **ARY-0484-101** after 4 to 6 inches of regrowth has occurred.

PREEMERGENCE IN CONVENTIONAL OR REDUCED TILLAGE CORN

ARY-0484-101 may be applied after planting and prior to corn emergencies. Application at 1 pt per treated acre may be made to medium or fine textured soils which contain 2% or greater organic matter. **DO NOT** apply to coarse textured soils (sand, sandy loam, and loamy sand) until after crop emergence (see Early Postemergence uses below).

Preemergence application of **ARY-0484-101** does not require mechanical incorporation to become active. A shallow mechanical incorporation is recommended if application is not followed by adequate rainfall or

sprinkler irrigation. Avoid tillage equipment (e.g., drags, harrows) which concentrate treated soil over seed furrow.

EARLY POSTEMERGENCE (ALL TILLAGE SYSTEMS)

Spike through 8 inch tall corn

ARY-0484-101 at 1 pt per treated acre may be applied during the period from corn emergence through the five leaf stage or 8 inches tall, whichever comes first. Reduce the rate to 1/2 pt per treated acre if corn is growing on coarse textured soils (sand, sandy loam, loamy sand). See Late Postemergence applications given below if the 6th true leaf is emerging from whorl or corn is greater than 8 inches tall.

LATE POSTEMERGENCE (ALL TILLAGE SYSTEMS)

8 to 36 inch tall corn

Application of **ARY-0484-101** at 1/2 pt per treated acre may be made from 8 to 36 inch tall corn or 15 days before tassel emergence, whichever comes first. For best performance, make applications when weeds are less than 3 inches tall.

Make directed spray application when: (1) corn leaves prevent proper spray coverage; (2) sensitive crops are growing nearby; (3) tank mixing with 2, 4-D.

DO NOT apply **ARY-0484-101** when soybeans are growing nearby if any of these conditions exist:

- corn is more than 24 inches tall
- soybeans are more than 10 inches tall
- soybeans have begun to bloom

OVERLAY (SEQUENTIAL) TREATMENTS

ARY-0484-101 may be applied to ground previously treated with one or more of the following herbicides registered for use in corn:

acetochlor (Surpass [®] , Harness [®])	dimethenamid (Frontier [®])	s-metolachlor (Dual [®] II Magnum)
alachlor (Lasso [®])	EPTC (Eradicane [®])	paraquat (Gramoxone [®])
atrazine	Guardman	pendimethalin (Prowl [®])
Bicep II Magnum [®]	glyphosate (Roundup [®])	simazine (Princep [®])
Bullet [®]	halosulfuron (Permit [®])	Surpass [®]
butylate (Sutan [®])	Lariat [®]	
Clarity [®]	Marksman [®]	

Apply **ARY-0484-101** at 1/2 pint per treated acre to ground previously treated with full rates of CLARITY or MARKSMAN herbicides. Allow at least 2 weeks between applications.

READ AND FOLLOW LABEL DIRECTIONS FOR EACH OF THE LISTED PRODUCTS.

Deleted: ABOVE

TANK MIX TREATMENTS

ARY-0484-101 may be tank mixed with one or more of, but not limited to, the following herbicides for control of grasses or additional broadleaf weeds in corn. **Read and follow the label of each tank mix product used for Precautionary Statements, Directions for Use, Rates and Timings, and, other restrictions.**

RATES AND TIMINGS

ARY-0484-101 PLUS	PREPLANT/PREMERGENCE (NO TILLAGE CORN)	PREEMERGENCE (CONVENTIONAL OR REDUCED TILLAGE CORN)	EARLY POST-EMERGENCE (ALL TILLAGE SYSTEMS)	LATE POST-EMERGENCE (ALL TILLAGE SYSTEMS)	ADDITIONAL DIRECTIONS
ACCENT (nicosulfuron)	-	-	1/2–1 oz ai/A	1/2–1 oz ai/A (to improve spray coverage of weeds and reduce risk of corn injury, use drop pipes to direct spray beneath corn leaves when corn is greater than 8 inches tall.)	Application may be made to emerged weeds before corn is greater than 24 inches tall. Use non-ionic surfactant at 0.25% (V/V) with this tank mixture.
atrazine	1 1/4–2 lb ai/A	1 1/4–2 lb ai/A	1 1/4–2 lb ai/A Crop oil concentrates may be used with this mixture if corn is 5 inches or less in height.	1 1/4–2 lb ai/A Do not apply if corn is greater than 12 inches tall.	Application may be made before grasses are 1 1/2 inches tall. Follow all state and Federal restrictions pertaining to atrazine applications.
BEACON (primisulfuron)	-	-	0.31–0.62 oz ai/A	0.31–0.62 oz ai/A (to improve spray coverage of weeds and reduce risk of corn injury, use drop pipes to direct spray beneath corn leaves when corn is greater than 8 inches tall).	Application may be made to emerged weeds when corn is 4 to 24 inches tall. Use non-ionic surfactant at 0.25% (v/v) with this tank mixture.
DUAL II Magnum/ Ii Magnum SI (metolachlor)	0.8–1.6 lb ai/A	0.8–1.6 lb ai/A (use only on fine or medium soils with 2 ½% or greater organic matter.)	0.8–1.6 lb ai/A	-	Application may be made before grasses reach the 2 leaf stage and before corn is greater than 3 inches tall.
FRONTIER (dimethenamid)	13–25 fl oz/A	13–25 fl oz/A (use only on fine or medium textured soils with 2.5% or greater organic matter.)	13–25 fl oz/A	-	Application may be made up to 8 inch tall corn. This treatment must be combined with a herbicide that provides postemergence control of grass weeds if they are greater than 1 inch tall at the time of application.
GRAMOXONE (paraquat)	1/4–1 lb ai/A	1/4–1 lb ai/A	-	-	Application may be made to emerged weeds but prior to corn

HARNESS or SURPASS (acetochlor)	1 1/2–3 lb ai/A	1 1/2–3 lb ai/A Use only on fine or medium textured soils with 2.5% or greater organic matter.	-	-	emergence. Application should be made prior to corn emergence.
LASSO (alachlor)	1 1/2–4 lb ai/A	1 1/2–4 lb ai/A Use only on textured soils with 2.5% organic matter.	1 1/2–4 lb ai/A	-	Application may be made before grasses reach the 2 leaf stage and before corn is greater than 3 inches tall. If microencapsula ted forms of alachlor are used (Lasso MT, Partner), applications must be made prior to grass emergence.
PRINCEP (simazine)	2.0–3.0 lb ai/A	2.0–3.0 lb ai/A	-	-	Application may be made prior to corn or weed emergence.
PROWL (pendimethalin)	-	3/4–1 1/2 lb ai/A Use only on fine or medium textured soils with 2.5% or greater organic matter.	3/4–1 1/2 lb ai/A	-	Application may be made immediately after planting but prior to weed emergence. Corn should not be beyond the 2 leaf stage of growth.
ROUNDUP (glyphosate)	1.0–3.0 lb ai/A	1.0–3.0 lb ai/A	-	-	Application may be made to emerged weeds but prior to corn emergence.
2,4-D	1/4–1/2 lb ai/A	1/4–1/2 lb ai/A	Do not use at this application timing	1/8 lb ai/A	Drop pipes are to be used when corn height is 8 inches or greater. Keeping the spray off the corn leaves and out of the whorl will reduce the likelihood of crop injury and improve spray coverage of the weed foliage.

SORGHUM (MILO)

Observe all PRECAUTIONS, including the reference to crops growing under stress, and read and follow MIXING, APPLICATION and CLEANING instructions.

Applications of **ARY-0484-101** to sorghum during periods of rapid growth may result in temporary leaning of plants or rolling of leaves. These effects are usually outgrown within 10 to 14 days.

DO NOT graze or feed treated sorghum forage or silage prior to mature grain stage.

If sorghum is grown for pasture or hay, refer to the PASTURE use section of the label. **DO NOT** apply **ARY-0484-101** to sorghum grown for seed production.

Make no more than one application per growing season.

WEEDS CONTROLLED

ARY-0484-101, when applied at the specified rate for sorghum, will control many actively growing ANNUAL broadleaf weeds and will reduce competition from established PERENNIAL broadleaf weeds as well as control their seedlings (Refer to WEED LIST).

RATES AND TIMINGS

ARY-0484-101 may be applied to emerged and actively growing weeds at least 15 days prior to planting. Postemergence application of **ARY-0484-101** must be made after sorghum is in the spike stage (all sorghum emerged) but before sorghum is 15 inches tall. For best performance, make applications when sorghum is in the 3 to 5 leaf stage and weeds are small (less than 3 inches tall). Use drop pipes (drop nozzles) if sorghum is taller than 8 inches. Keeping the spray off the sorghum leaves and out of the whorl will reduce the likelihood of crop injury and improve spray coverage of weed foliage.

BROADCAST RATE PER TREATED ACRE:

1/2 pt (1/4 lb ai)

TANK MIX TREATMENTS

ARY-0484-101 plus Atrazine

For improved control of emerged, actively growing broadleaf weeds including triazine resistant species and added suppression of perennial broadleaf weeds, tank mix 1/2 pt **ARY-0484-101** with 0.5–1.25 lb ai atrazine per treated acre. For control of grasses (less than 1.5 inches tall), tank mix 1/2 pt **ARY-0484-101** with 2 lb ai atrazine per treated acre. For best performance and minimal crop injury, make application when sorghum is 3 to 8 inches tall and when broadleaf weeds are small (less than 6 inches tall). Application of atrazine must be made before sorghum is beyond 12 inches tall. The atrazine rate will depend upon soil texture and length of residual weed control desired. Follow all state and federal restrictions pertaining to atrazine applications.

ARY-0484-101 plus BUCTRIL®

For improved control of broadleaf weeds, tank mix 1/2 pt **ARY-0484-101** with 1–1 1/2 pt (0.25–0.375 lb ai/A) **Buctril** per treated acre. Make application at 4 leaf to 15 inch tall sorghum. Use drop nozzles to direct spray beneath sorghum leaves when sorghum is greater than 8 inches tall.

READ AND FOLLOW THE LABEL OF EACH TANK MIX PRODUCT USED FOR PRECAUTIONARY STATEMENTS, DIRECTIONS FOR USE, APPLICATION RATES AND TIMINGS, AND OTHER RESTRICTIONS.

OVERLAY (SEQUENTIAL) TREATMENTS

ARY-0484-101 may be applied to ground previously treated with one or more of the following herbicides.

Herbicide	Maximum rate per treated acre (lb ai)
atrazine ¹	2.5
s-metolachlor (Dual II Magnum®) (Concep® treated seed)	1.33

¹Maximum use rate for atrazine is determined by soil type, tillage practices used, surface residue, and state or local restrictions. Follow the more restrictive requirements when determining the maximum use rate for atrazine.

PREHARVEST USES

For Use Only In the States of Texas and Oklahoma

ARY-0484-101 may be applied for weed suppression any time after the sorghum has reached the soft dough stage. An agriculturally approved surfactant may be used to improve performance. For aerial applications use at least 2 gal of water-based carrier per treated acre.

Delay harvest until 30 days after treatment.

BROADCAST RATE PER TREATED ACRE: 1/2 pt (1/4 lb ai)

SMALL GRAINS (WHEAT, BARLEY, AND OATS)

Not Underseeded to Legumes

IMPORTANT

Observe all PRECAUTIONS and read and follow CLEANING, MIXING and APPLICATION instructions.

Preharvest interval (PHI) restriction for grain is 7 days.

If small grains are used for pasture hay, the following restrictions apply:

- Animals cannot be removed from treated area for slaughter prior to 30 days after last application.
- There is no waiting period between treatment and grazing for non-lactating dairy animals.
- Treated areas may not be grazed by lactating dairy animals before 7 days after treatment.
- Do not harvest hay from treated areas before 37 days after treatment.

NOTE: Observe all precautions and restrictions on the labels of products used in tank mix treatments.

WEEDS CONTROLLED

ARY-0484-101, or combinations with listed tank mix partners, will provide control or suppression of annual broadleaf weeds listed below. For improved control of listed weeds, it is recommended that **ARY-0484-101** be applied in a tank mix with other herbicides. Refer to specific crop for tank mix options.

Alkanet ¹	Jacob's Ladder ¹	Pigweed, Rough
Bedstraw, Catchweed ¹	Knawel (German Moss)	Pigweed, Tumble
Bindweed, Field ²	Knotweed, Prostrate	Pineappleweed ¹
Buckwheat, Tartary	Kochia	Plantain, Broadleaf ²
Buckwheat, Wild	Ladysthumb	Poppy, Red Horned ¹
Carpetweed ¹	Lambsquarters, Common	Puncturevine ¹
Chamomile, Corn	Lettuce, Miners ¹	Puslane, Common ¹
Chervil, Bar	Lettuce, Prickly	Radish, Wild ¹
Chickweed, Common ¹	Mallow, Common	Ragweed, Common ¹
Cockle, Corn	Mayweed, Chamomile	Ragweed, Giant (Buffaloweed) ¹
Cockle, Cow	(Dogfennel)	Rocket, London ¹
Cocklebur, Common	Mustard, Blue (Purple)	Rocket, Yellow ¹
Cornflower (Bachelorbutton) ¹	Mustard, Tansy	Salsify (Goatsbeard) ¹
Dandelion, Common ²	Mustard, Treacle ¹	Shepherdspurse ¹
Dock, Curly ²	Mustard, Tumble (Jim Hill) ¹	Smartweed, Green
Dragonhead, American ¹	Mustard, Wild ¹	Smartweed, Pennsylvania
Evening Primrose, Cutleaf ¹	Nightshade, Black	Sorrel, Red (Sheep Sorrell) ¹
Falseflax, Smallseeded ¹	Nightshade, Cutleaf ¹	Sowthistle, Annual
Fiddleneck (Tarweed) ¹	Nightshade, Silverleaf ²	Starthistle, Yellow ¹
Flixweed ¹	(White Horsenettle)	Sunflower, Common (Wild)
Fumitory ¹	Pennycress, Field (Fanweed,	Thistle, Canada ²
Gromwell, Corn ¹	Frenchweed, Stinkweed)	Thistle, Russian
Groundsel, Common ¹	Pepperweed, Peppergrass ¹	Velvetleaf
Hempnettle ¹	Pigweed, Redroot	Vetch ¹
Henbit	(Carelessweed)	Yarrow, Common ²

¹These weeds will be controlled with **ARY-0484-101** tank mixtures. Refer to tank mix label for specific weeds controlled.

²**ARY-0484-101** tank mixes will provide suppression of established broadleaf weeds and control of their seedlings.

RATES AND TIMINGS

Application of **ARY-0484-101** may be made before, during or after planting of small grains. For best performance, make applications when weeds are in the 2 to 3 leaf stage and rosettes are less than 2 inches across. Application of **ARY-0484-101** to small grains during periods of rapid growth may result in crop leaning. This condition is temporary and will not reduce crop yields.

Use **ARY-0484-101** at 2–4 fl oz per treated acre in wheat, fall seeded barley, and oats, and at 2–3 fl oz per treated acre in spring seeded barley. Use the higher level of listed rate ranges when treating difficult to control weeds such as kochia, Russian thistle, and prickly lettuce or dense vegetative growth.

ARY-0484-101 used in a tank mix with other herbicides offers the best spectrum of weed control and herbicide tolerant or resistant weed management. Refer to specific crop for **ARY-0484-101** rate and application timing.

For applications prior to the emergence of weeds or when sulfonylurea resistant weeds are present or suspected, use a minimum of 3 fl oz per treated acre of **ARY-0484-101** with a tank mix herbicide. Non-sulfonylurea herbicides such as 2, 4-D or MCPA tank mixed with **ARY-0484-101** will offer more consistent control of sulfonylurea resistant weeds.

When tank mixing with sulfonylurea herbicides, such as **Ally**®, **Amber**®, **Express**®, and **Harmony**® Extra use an agriculturally approved surfactant of at least 80% active ingredient at the rate of 1 to 4 pt/100 gal of spray or not more than 0.25 to 0.5% by volume. Use the highest rate of surfactant when using the lower rate ranges of the tank mix and/or when treating more mature and difficult to control weeds or dense vegetative growth.

FALL AND SPRING SEEDED WHEAT

ARY-0484-101 MUST BE APPLIED TO FALL SEEDED WHEAT PRIOR TO THE JOINTING STAGE. APPLICATIONS TO SPRING SEEDED WHEAT MUST BE MADE BEFORE WHEAT EXCEEDS THE 5 LEAF STAGE. Early developing wheat varieties such as TAM107, MADISON, or WAKEFIELD must receive application between early tillering and the jointing stage. Care should be taken in staging these varieties to be certain that the application occurs prior to the jointing stage.

TANK MIX TREATMENTS

ARY-0484-101 may be tank mixed with one or more, but not limited to, the following herbicides. Read and follow the label of each tank mix product used for precautionary statements, directions for use, weeds controlled, and geographic and other restrictions.

BROADCAST RATE PER TREATED ACRE

Apply 2–4 fl oz **ARY-0484-101** with:

Product	Active Ingredient	Formulation	Amount of Product Per Acre
2,4-D amine or ester	2,4-D	4.0 lb/gal	8.0–12.0 fl oz (0.25–0.375 lb ai/A) ¹
MCPA amine or ester	MCPA	4.0 lb/gal	8.0–12.0 fl oz (0.25–0.375 lb ai/A) ¹
Ally®	metsulfuron-methyl	60% DF	1/10 oz
Amber®	triasulfuron	75% DF	0.28 oz
Express®	thifensulfuron + tribenuron-methyl	75% DF	1/6 oz
Harmony® Extra	thifensulfuron + tribenuron-methyl	75% DF	1/3 oz
Buctril®	Bromoxynil ²	2.0 lb/gal	1.0–1.5 pt
Bronate®	bromoxynil + MCPA	4.0 lb/gal	1.0–2.0 pt
Curtail®	clopyralid + 2,4-D	2.38 lb/gal	2.0–2 2/3 pt
Stinger	clopyralid	3.0 lb/gal	1/4–1/3 pt
Karmex® ³	Diuron ²	80% DF	1/2–1.5 lb
Sencor® ³	Metribuzin ²	75% DF	1.0–10.0 oz

¹When using formulations other than 4 lb/gal use pounds active/acre listed.

²Herbicides with the same active ingredient and/or different formulations may be used.

³Tank mixtures for fall seeded wheat only.

SPECIAL USE TANK MIXES FOR SPRING AND FALL SEEDED WHEAT (SEE FOOTNOTES FOR APPLICABLE USES)

Apply 3–4¹ fl oz of **ARY-0484-101** with:

Product ²	Active Ingredient	Amount of Formulation	Product Per Acre
2,4-D or MCPA amine	2,4-D or MCPA	4.0 lb/gal	1.0–2.0 pt ³ (0.5–1.0 lb ai/A) ⁴
2,4-D or MCPA ester	2,4-D or MCPA	4.0 lb/gal	1.0–1.5 pt ³ (0.5–0.75 lb ai/A) ⁴
Ally	metsulfuron-methyl	60%DF	1/20–1/10 oz
Amber	triasulfuron	75%DF	0.14–0.28 oz
Express	thifensulfuron + tribenuron-methyl	75%DF	1/12–1/6 oz
Harmony Extra	thifensulfuron + Tribenuron-methyl	75%DF	1/6–1/3 oz
Ally + 2,4-D amine or ester ⁵	metsulfuron methyl + 2,4-D	60%DF + 4.0 lb/gal	1/20–1/10 oz + 8.0 fl oz
Amber + 2,4-D amine or ester ⁵	triasulfuron + 2,4-D	75%DF + 4.0 lb/gal	0.14 oz–0.28 oz + 8.0 fl oz
Express + 2,4-D amine or ester ⁵	(thifensulfuron + tribenuron-methyl) + 2,4-D	75%DF + 4.0 lb/gal	1/12–1/6 oz + 8.0 fl oz
Harmony Extra + 2,4-D amine or ester ⁵	(thifensulfuron + tribenuron-methyl) + 2,4-D	75%DF + 4.0 lb/gal	1/6–1/3 oz + 8.0 fl oz
Roundup ⁶	glyphosate	3.0 lb/gal	12.0–16.0 fl oz

¹**ARY-0484-101** may be used at 6 fl oz on fall seeded wheat in Western Oregon as a spring application only. In CO, KS, NM, OK and TX up to 8 fl oz of **ARY-0484-101** may be applied on fall seeded wheat after it exceeds the 3 leaf stage for suppression of perennial weeds, such as field bindweed. Applications may be made in the fall following a frost but before a killing freeze. **ARY-0484-101** may be tank mixed with 2,4-D amine at 8 fl oz after wheat begins to tiller. Periods of extended stress such as cold and wet weather may enhance the possibility of crop injury. For fall applications only, do not use if the potential for crop injury is not acceptable.

²Do not use low rates of sulfonyleurea herbicides, such as Ally, Amber, Express, and Harmony Extra on more mature weeds and/or on dense vegetative growth.

³Note: For use on Fall Seeded Wheat Only. Do Not Use unless potential crop injury will be acceptable.

⁴When using formulations other than 4 lb/gal use pounds active/acre listed.

⁵Use for improved control of Russian thistle, flaxweed, gromwell, mayweed, and fiddleneck.

⁶ **ARY-0484-101** may be applied at 2 fl oz with Roundup as a preplant application to small grains with no waiting period prior to planting. Add 0.5% by volume of an agriculturally approved non-ionic surfactant.

FALL SEEDED BARLEY

ARY-0484-101 MUST BE APPLIED TO FALL SEEDED BARLEY PRIOR TO THE JOINTING STAGE.

Note: For spring barley varieties that are seeded during the winter months or later, follow the rates and timings given for spring seeded barley.

TANK MIX TREATMENTS

ARY-0484-101 may be tank mixed with one or more of the following herbicides. Read and follow the label of each tank mix product used for precautionary statements, directions for use, weeds controlled and geographic and other restrictions.

BROADCAST RATE PER TREATED ACRE

Apply 2-4 fl oz **ARY-0484-101** with:

Product ¹	Active Ingredient	Formulation	Amount of Product Per Acre
2,4-D amine or ester	2,4-D	4.0 lb/gal	8.0 fl oz (0.25lb ai/A) ²
MCPA amine or ester	MCPA	4.0 lb/gal	8.0–12.0 fl oz (0.25–0.375 lb ai/A)
Ally [®]	metsulfuron-methyl	60% DF	1/20–1/10 oz
Amber [®]	triasulfuron	75% DF	0.14–0.28 oz
Express [®]	thifensulfuron + tribenuron-methyl	75% DF	1/2–1/6 oz
Harmony [®] Extra	thifensulfuron + tribenuron-methyl	75% DF	1/6–1/3 oz
Sencor [®] 4	metribuzin	75% DF	1.0–10.0 oz
Buctril [®]	bromoxynil	2.0 lb/gal	1.0–1 1/2 pt
Bronate [®]	bromoxynil + MCPA	4.0 lb/gal	3/4–1 1/2 pt

¹**DO NOT** use low rates of sulfonylureas (Ally, Amber, Express, and Harmony Extra) on more mature weeds and/or on dense vegetative growth.

²When using formulations other than 4 lb/gal use pounds active/acre listed.

³Herbicides with the same active ingredient and/or different formulations may be used.

SPRING SEEDED BARLEY

ARY-0484-101 MUST BE APPLIED BEFORE SPRING SEEDED BARLEY EXCEEDS THE 4-LEAF STAGE.

TANK MIX TREATMENTS

ARY-0484-101 may be tank mixed with one or more of the following herbicides. Read and follow the label of each tank mix product used for precautionary statements, directions for use, weeds controlled and geographic and other restrictions.

BROADCAST RATE PER TREATED ACRE

Apply 2–3 fl oz **ARY-0484-101** with:

Product ¹	Active Ingredient	Formulation	Amount of Product Per Acre
MCPA amine or ester	MCPA	4.0 lb/gal	8.0–12.0 fl oz (0.25–0.375 lb ai/A) ²
Ally [®]	metsulfuron-methyl	60% DF	1/20–1/10 oz
Amber [®]	triasulfuron	75% DF	0.14–0.28 oz
Express [®]	thifensulfuron + tribenuron-methyl	75% DF	1/12–1/6 oz
Harmony [®] Extra	thifensulfuron + tribenuron-methyl	75% DF	1/6–1/3 oz
Sencor [®]	metribuzin ³	75% DF	1.0–10.0 oz
Buctril [®]	bromoxynil	2.0 lb/gal	1.0–1 1/2 pt
Bronate [®]	bromoxynil + MCPA	4.0 lb/gal	3/4–1 1/2 pt

¹**DO NOT** use low rates of sulfonylureas (Ally, Amber, Express, and Harmony Extra) on more mature weeds and/or on dense vegetative growth.

²When using formulations other than 4 lb/gal use pounds active/acre listed.

³Herbicides with the same active ingredient and/or different formulations may be used.

FALL AND SPRING SEEDED OATS

ARY-0484-101 MUST BE APPLIED BEFORE SPRING SEEDED OATS EXCEED THE 5 LEAF STAGE. APPLICATIONS TO FALL SEEDED OATS MUST BE MADE PRIOR TO THE JOINTING STAGE.

TANK MIX TREATMENTS

ARY-0484-101 may be tank mixed with one or more of the following herbicides. Read and follow the label of each tank mix product used for precautionary statements, directions for use, weeds controlled and geographic and other restrictions.

BROADCAST RATE PER TREATED ACRE

Apply 2–4 fl oz **ARY-0484-101** with:

Product	Active Ingredient	Formulation	Amount of Product Per Acre
MCPA amine or ester	MCPA	4.0 lb/gal	8.0–12.0 fl oz (0.25–0.375 lb ai/A) ¹

¹ When using formulations other than 4 lb/gal use pounds active/acre listed.

SUGARCANE

Observe all PRECAUTIONS. Read and follow MIXING, APPLICATION AND CLEANING instructions. Consult your local or state authorities for possible application restrictions, especially concerning aerial applications and advice concerning special local use situations.

The pre-harvest interval (PHI) for Sugarcane is 87 days.

WEEDS CONTROLLED

ARY-0484-101, when applied at specified rates, will control many ANNUAL, BIENNIAL, and PERENNIAL broadleaf weeds commonly found in sugarcane. (Refer to WEED LIST).

RATES AND TIMINGS

Application of **ARY-0484-101** may be made any time after weeds have emerged and are actively growing but before the close-in stage of sugarcane. Application rates and timings of **ARY-0484-101** are given below. Use the higher level of listed rate ranges when treating dense vegetative growth.

Weed Stage and Type	Amount Product	Broadcast Rate per Treated Acre lb of ai
Annual		
Small, actively growing	1/2–1 pt	1/4–1/2
Established weed growth	1–1 1/2 pt	1/2–3/4
Biennial	1–2 pt	1/2–1
Perennial	2 pt	1 ¹

¹ Application made over the top of actively growing sugarcane may result in crop injury.

When possible, direct the spray beneath the sugarcane canopy in order to minimize the likelihood of crop injury. The use of directed sprays will also aid in maximizing spray coverage of weed foliage.

Retreatment may be made as needed, however, do not exceed a total of 2 applications of **ARY-0484-101** per year.

TANK MIX TREATMENTS

ARY-0484-101 may be tank mixed with one or more of, not limited to, the following herbicides for control of grasses or additional broadleaf weeds. Read and follow the label of each tank mix product used for precautionary statements, directions for use, rates and timings, weeds controlled, and geographic and other restrictions.

Herbicide	Rates per Treated Acre (lb ai)
Ametryn (Evik®)	2/5–8.0
Asulam (Asulox®)	2.0–3 1/3
atrazine	2/5–4.0
2,4-D	1/2–3.0 ¹

¹Application of **ARY-0484-101** plus 2,4-D tank mix at the higher level rate ranges may result in crop injury.

PASTURE, HAY, RANGELAND, AND FARMSTEAD (NON-CROPLAND)

The pre-harvest interval (PHI) for grass forage is 0 days.

The pre-harvest interval (PHI) for grass hay is 7 days.

ARY-0484-101 is recommended for use on pasture, hay, rangeland, and general farmstead (non-cropland) (including fence rows and non-irrigation ditch banks), for broadleaf weed and brush control. **ARY-0484-101** may also be applied to non-cropland areas for the control of broadleaf weeds in Noxious Weed Control Programs, Districts or Areas including broadcast or spot treatment of roadsides and highways, utilities, railroad, and pipeline rights-of-way. Noxious weeds must be recognized at the State level but programs may be administered at State, County, or other levels.

Observe all PRECAUTIONS, read and follow MIXING, APPLICATION AND CLEANING instructions.

ARY-0484-101 uses described in this section also pertain to small grains (such as barley, forage sorghum, oats, rye, sudangrass or wheat) grown for pasture use only.

NEWLY SEEDED AREAS may be severely injured if rates of **ARY-0484-101** are greater than 1 pt/A.

ESTABLISHED GRASS CROPS growing under stress can exhibit various injury symptoms that may be more pronounced if herbicides are applied.

Bentgrass, carpetgrass, buffalograss, and St. Augustine grass may be injured at rates exceeding 1 pt **ARY-0484-101** (1/2 lb ai) per treated acre. Usually colonial bentgrasses are more tolerant than creeping types. Velvetgrasses are most easily injured. Treatments will kill or injure alfalfa, clovers, lespedeza, wild winter peas, vetch, and other legumes.

ANIMALS CANNOT BE REMOVED FROM TREATED AREA FOR SLAUGHTER PRIOR TO 30 DAYS AFTER LAST APPLICATION.

THERE IS NO WAITING PERIOD BETWEEN TREATMENT AND GRAZING FOR NON-LACTATING ANIMALS.

TIMING RESTRICTIONS FOR LACTATING DAIRY ANIMALS FOLLOWING TREATMENT

ARY-0484-101 Rate per Treated Acre	Days Before Grazing	Days Before Hay Harvest
Up to 1 pt (1/2 lb ai)	7 days	37 days
Up to 2 pt (1 lb ai)	21 days	51 days

Note: Observe all precautions and restrictions on labels of products used in tank mixtures.

MIXING AND APPLICATION

ARY-0484-101 can be applied using water, oil in water emulsions (including invert systems), or sprayable fluid fertilizer as a carrier. A **COMPATIBILITY TEST** (see COMPATIBILITY TEST section) should be made prior to tank mixing.

To prepare oil in water emulsions, half-fill spray tank with water, then add the appropriate amount of emulsifier. With continuous agitation, slowly add the herbicide and then the oil (such as diesel oil or fuel oil)

or a premix of oil plus additional emulsifier to spray tank. Complete filling of spray tank with water. Maintain vigorous agitation during spray operation to prevent oil and water from forming separate layers.

ARY-0484-101 may be applied broadcast using either ground or aerial application equipment. When using ground equipment, apply 3 to 600 gallons of diluted spray per treated acre. Volume of spray applied will depend on the height, density, and type of weeds or brush being treated and on the type of equipment being used. When using aerial equipment apply 1 to 40 gallons of diluted spray per treated acre in a water-based carrier.

ARY-0484-101 may be applied to individual clumps or small areas (SPOT TREATMENT) of undesirable vegetation using handgun or similar types of application equipment. Apply diluted sprays to allow complete wetting (up to runoff) of foliage and stems.

Herbicide adjuvants or other spray additives (emulsifiers, surfactants, wetting agents, drift control agents, or penetrants) may be used for wetting, penetration, or drift control. Spray additives must be agriculturally approved when used in pasture applications. If spray additives are used, read and follow all use recommendations and precautions on product label.

WEEDS CONTROLLED

ARY-0484-101, when applied at specified rates, will give control of many ANNUAL, BIENNIAL, and PERENNIAL broadleaf weeds, and many WOODY brush and vine species commonly found in pasture, hay, rangeland, and general farmstead (non-cropland) areas. (Refer to WEED LIST.) Noted (*) PERENNIAL weeds may be controlled with lower rates of either **ARY-0484-101** or **ARY-0484-101** plus 2,4-D. See the following RATES AND TIMINGS section.

RATES AND TIMINGS

Application rates and timing of **ARY-0484-101** are given in the following table. Use the higher level of listed rate ranges when treating dense or tall vegetative growth.

Weed Stage& Type	Amount Product	Broadcast rate per and treated acre (lb ai)
Annual		
Small, actively growing	1/2–1.0 pt	1/4–1/2
Established weed growth	1.0–1 1/2 pt	1/2–3/4
Biennial¹		
Rosette diameter		
Less than 3 inches	1/2–1.0 pt	1/4–1/2
3 inches or more	1.0–2.0 pt	1/2–1.0
Bolting	2.0 pt	1.0
Perennial		
Suppression or top growth control	1/2–1.0 qt	1/2–1.0
Noted (*) perennials	1.0 qt	1.0*
Woody Brush & Vines		
Top growth suppression	1/2–1.0 qt	1/2–1.0
Top growth control ²	1.0 qt	1.0

¹ For best performance, make application when Biennial weeds are in the rosette stage.

² Species noted in WEED LIST will require tank mixtures for adequate control.

Retreatments may be made as needed; however, **DO NOT** exceed a total of 2 applications of **ARY-0484-101** per year.

TANK MIX TREATMENTS

READ AND FOLLOW THE LABEL OF EACH TANK MIX PRODUCT USED FOR PRECAUTIONARY STATEMENTS, DIRECTIONS FOR USE, APPLICATION RATES, AND OTHER RESTRICTIONS. **ARY-0484-101** may be tank mixed with one or more, but not limited to, of the following herbicides for control of grasses, additional broadleaf weeds, and woody brush and vines.

Herbicide	Rates per treated acre (lb ai)
Pasture, hay, rangeland, and general farmstead (non-cropland) use:	
glyphosate (Roundup®)	3/4–3 3/4
metsulfuron methyl (Ally)	0.0038–0.011
paraquat (Gramoxone)	1/2–1.0
picloram (Tordon®)	1/8–3.0
triclopyr (Garlon®)	3/4–9.0
2,4-D	1/4–6.0

Due to the variations that may occur in formulated products and specific use ingredients (e.g., water supplies), a COMPATIBILITY TEST (see COMPATIBILITY TEST) is recommended prior to actual tank mixing.

CUT SURFACE TREE TREATMENTS

ARY-0484-101 may be applied as a cut surface treatment for control of unwanted trees and prevention of sprouts of cut trees. A mix of 1 part **ARY-0484-101** with 1 to 3 parts water should be used in application. Use the lower dilution when treating difficult-to-control species.

FRILL OR GIRDLE TREATMENTS: Make a continuous cut or a series of overlapping cuts using an axe to girdle tree trunk. Spray or paint cut surface with the **ARY-0484-101**/water mix.

STUMP TREATMENTS: Spray or paint freshly cut surface with the water mix. The area adjacent to the bark should be thoroughly wet.

Note: for more rapid foliar effects, 2,4-D may be added to the **ARY-0484-101**/water mix.

DORMANT APPLICATIONS FOR CONTROL OF MULTIFLORA ROSE

ARY-0484-101 can be applied when plants are dormant as an undiluted SPOT CONCENTRATE directly to the soil or as a LO-OIL BASAL BARK treatment using an oil-water emulsion solution.

SPOT-CONCENTRATE applications of **ARY-0484-101** should be applied directly to the soil as close as possible to the root crown but within 6 to 8 inches of the crown. On sloping terrain, application should be made to the uphill side of the crown. Do not make application when snow or water prevents applying **ARY-0484-101** directly to the soil. The use rate of **ARY-0484-101** is dependent on the canopy diameter of the multiflora rose. Examples: Use **ARY-0484-101** at 1/4, 1.0, or 2 1/4 fl oz of product respectively, for 5, 10, or 15 feet canopy diameters. Do not exceed a total of 2 qt **ARY-0484-101** per acre per year.

LO-OIL BASAL BARK applications of **ARY-0484-101** should be applied to the basal stem region from the ground line up to a height of 12 to 18 inches. Spray until runoff, with special emphasis on covering the root crown. For best results, make application when plants are dormant. Do not make application after bud break or when plants are showing signs of active growth. Do not make application when snow or water prevents applying **ARY-0484-101** to the ground line. Refer to MIXING AND APPLICATIONS in this section for method of preparing oil-in-water emulsion. Example for making approximately 2 gallons of a LO-OIL spray solution mixture: combine 1 1/2 gal of water plus 1 oz emulsifier plus 1 pt **ARY-0484-101** plus 2 1/2 pt of No. 2 diesel fuel. Adjust amounts of materials used proportionately to the amount of final spray solution desired. DO NOT exceed 8 gal of final spray solution applied per acre per year.

ARY-0484-101 is recommended for use on both newly seeded and established grasses grown in Conservation Reserve or Federal Set-A-Side Programs.

Observe all PRECAUTIONS and read and follow MIXING, APPLICATION and CLEANING instructions.

ARY-0484-101 treatment will cause injury or may kill alfalfa, clovers, lespedeza, wild winter peas, vetch, and other legumes.

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Agriculturally approved surfactants may be added to the spray mixture to improve postemergence weed control, particularly in dry growing conditions.

Do not use adjuvants containing penetrants such as petroleum-based oils after grass emergence on newly seeded grasses.

NEWLY SEEDED AREAS

ARY-0484-101 may be applied either preplant or postemergence to newly seeded grasses or small grains such as barley, oats, rye, sudangrass, wheat or other grain species grown as a cover crop. Postemergence applications may be made after seedling grasses exceed the 3 leaf stage. Rates of **ARY-0484-101** greater than 1 pt per treated acre may severely injure newly seeded grasses. Preplant applications – injury to new seedlings may occur if intervals between application and grass planting is less than 45 days per pint of **ARY-0484-101** per treated acre west of the Mississippi River or 20 days per pt east of the Mississippi River.

Deleted: East

ESTABLISHED GRASS STANDS

Established grass stands are perennial grasses planted one or more seasons prior to treatment. Certain species: bentgrass, carpetgrass, smooth brome, buffalograss or St. Augustine grass may be injured when treated with **ARY-0484-101** at rates exceeding 1 pt per treated acre.

WEEDS CONTROLLED

ARY-0484-101, when applied at specified rates, will control many ANNUAL and BIENNIAL weeds and provide control or suppression of many perennial weeds. (Refer to WEED LIST)

RATES AND TIMINGS

Application rates and timing of **ARY-0484-101** treatment are given below. Use the higher rate of the rate range when vegetation is either dense or tall, or when weeds are growing under stressed conditions such as drought or cool temperature.

Weed Type ¹ & Stage	Broadcast Rate Per Treated Acre	
	Amount of Formulated ARY-0484-101 pt	Equivalent lb ai
Annuals		
Small actively growing	1/4–1.0	1/8–1/2
Established weed growth	1.0	1/2
Biennials ²		
Rosette diameter		
a) less than 3 inches	1/2–1.0	1/4–1/2
b) 3 inches or greater	1.0–2.0	1/2–1.0
c) bolting biennial	2.0	1.0
Perennials ²		
Suppression/Control	2.0	1.0

¹ For best results, treat biennial weeds with **ARY-0484-101** when they are in the rosette stage of growth. Retreatment may be made as needed; however, do not exceed a total of 2 applications of **ARY-0484-101** per treated acre during a growing season.

² Biennial and Perennial weeds will require follow-up (sequential) treatments for seedling control and escapes.

TANK MIX TREATMENTS

To control grasses and additional broadleaf weeds, **ARY-0484-101** may be tank mixed with other herbicides registered for use in Conservation Reserve Programs such as 2,4-D, glyphosate (Roundup), paraquat (Gramoxone), metsulfuron (Ally) and others.

READ AND FOLLOW THE LABEL OF EACH TANK MIX PRODUCT USED FOR PRECAUTIONARY STATEMENTS, DIRECTIONS FOR USE, APPLICATION RATES, AND OTHER RESTRICTIONS.

ASPARAGUS

Observe all PRECAUTIONS and read and follow MIXING, APPLICATION and CLEANING instructions. If spray contacts emerged spears, crooking (twisting) of some spears may result. If such crooking occurs, discard affected spears.

DO NOT harvest prior to 24 hours after treatment.

DO NOT use in the Coachella Valley of California.

Multiple applications may be made per growing season. Do not exceed a total of 1 pt of **ARY-0484-101** per treated acre per crop year.

RATES AND TIMINGS

Apply **ARY-0484-101** to emerged and actively growing weeds in 40 to 60 gal of diluted spray per treated acre immediately after cutting the field, but at least 24 hours before the next cutting.

Weeds	Rate Per Treated Acre
Mustard, Black, Pigweed, Redroot (Carelessweed) Sowthistle, Annual Thistle, Canada ¹ Thistle, Russian	1/2–1.0 pt (1/4–1/2 lb ai)
Bindweed, Field ¹ Chickweed, Common Goosefoot, Nettleleaf Radish, Wild Thistle, Milk	1.0 pt (1/2 lb ai)

¹**ARY-0484-101** may be applied in a tank mixture with either 2,4-D or Roundup herbicide for improved control of Canada thistle and field bindweed.

READ AND FOLLOW 2,4-D OR ROUNDUP HERBICIDE PRODUCT LABELING FOR PRECAUTIONARY STATEMENTS, DIRECTIONS FOR USE, APPLICATION RATES AND TIMINGS, AND OTHER RESTRICTIONS.

TURF AND LAWNS

FOR USE IN FARMSTEAD (NON-CROPLAND) AND SOD FARMS

IMPORTANT

Observe all PRECAUTIONS and read and follow MIXING, APPLICATION and CLEANING instructions.

To avoid injury to newly seeded grasses, application of **ARY-0484-101** should be delayed until after the second mowing. Furthermore, application rates in excess of 1 pt (1/2 lb ai) per treated acre may cause noticeable stunting or discoloration of sensitive grass species such as bentgrass, carpetgrass, buffalograss, and St. Augustine grass.

In areas where roots of sensitive plants extend, do not apply in excess of 1/4 pt (1/8 lb ai) of **ARY-0484-101** per treated acre on coarse textured (sandy-type) soils, or in excess of 1/2 pt (1/4 lb ai) per treated acre on fine textured (clay-type) soils. Do not make repeat applications in these areas for 30 days and until previous applications of **ARY-0484-101** have been activated in the soil by rain or irrigation.

WEEDS CONTROLLED

ARY-0484-101, when applied at specified rates, will give control of many ANNUAL, BIENNIAL, and noted (*) PERENNIAL broadleaf weeds commonly found in turf. **ARY-0484-101** will also give growth suppression of many other listed PERENNIAL broadleaf weeds and WOODY brush and vine species. (Refer to WEED LIST.)

MIXING AND APPLICATION

Apply 30 to 200 gal of diluted spray per treated acre (3 qt–4 1/4 gal per 1,000 sq ft), depending on density or height of weeds treated and on the type of equipment used.

RATES AND TIMINGS

Use the higher level of listed rate **ranges** when treating dense vegetative growth.

Weed Stage & Type	ARY-0484-101		
	Pints per treated acre	lb ai per treated acre	teaspoons per 1,000 sq ft
Annual Small, actively growing Established weed growth	1/2–1.0 1.0–1 1/2	1/4–1/2 1/2–3/4	1.0–2 1/4 2 1/4–3 1/4
Biennial Rosette diameter Less than 3 inches 3 inches or more	1/2–1.0 1.0–2.0	1/4–1/2 1/2–1.0	1.0–2 1/4 2 1/4–4 1/2
Perennials and Woody Brush and Vines	1.0–2.0	1/2–1.0	2 1/4–4 1/2

For best performance, apply when weeds are emerged and actively growing.

Retreatment may be made as needed, however, do not exceed a total of 2 applications of **ARY-0484-101** per year. Do not exceed a total of 2 pt (1 lb ai) **ARY-0484-101** per treated acre during the growing season.

TANK MIX TREATMENTS

READ AND FOLLOW THE LABEL OF EACH TANK MIX PRODUCT USED FOR PRECAUTIONARY STATEMENTS, DIRECTIONS FOR USE, APPLICATION RATES AND TIMINGS AND OTHER RESTRICTIONS.

Tank mix treatments of **ARY-0484-101** may be made with 2,4-D, MCPA, MCPP, or bromoxynil for control of additional weeds listed on the tank mix product label.

Apply 1/5–1/2 pt (1/10–1/4 lb ai) of **ARY-0484-101** per treated acre with 1/2–1 1/2 lb acid equivalent of 2,4-D, MCPA, or MCPP, or with 3/8–1/2 lb ai of bromoxynil. Use the higher level of the listed rate ranges when treating established weeds. Repeat treatments may be made as needed; however, do not exceed 2 pt (1 lb ai) of **ARY-0484-101** per treated acre during the growing season.

GRASS SEED CROPS:

GRASSES GROWN FOR SEED SUCH AS BERMUDA GRASS, BLUEGRASS, FESCUE, AND RYEGRASS

IMPORTANT

Observe all PRECAUTIONS. Read and follow MIXING, APPLICATION and CLEANING instructions. Refer to the **PASTURE, HAY, RANGELAND, AND GENERAL FARMSTEAD (Non-Cropland)** Section for possible grazing and feeding restrictions.

Do not use on bentgrass unless possible crop injury can be tolerated.

WEEDS CONTROLLED

ARY-0484-101 will provide control or suppression of annual broadleaf weeds listed below. For improved control of listed weeds plus additional weeds, it is recommended that **ARY-0484-101** be applied in a tank mix with other herbicides.

Alfalfa ¹	Clover	Lambsquarters, Common
Bedstraw, Catchweed	Cockle, White	Lettuce, Prickly
Bindweed, Field	Dock, Broadleaf	Mayweed (Dogfennel)
Buttercup, Corn	Dock, Curly	Ragwort, Tansy
Buttercup, Creeping	Hemlock, Poison	Sorrel, Red (Sheep Sorrel)
Buttercup, Western Field	Knapweed, Russian ¹	Sowthistle, Annual
Catchfly, Nightflowering	Knawel	Starwort, Little
Chamomile, Corn	Knotweed, Prostrate	Thistle, Canada ¹
Chickweed, Common	Kochia	
Chickweed, Mouseear	Ladysthumb	

¹Top growth only

RATES AND TIMINGS

Apply 1/2–1 pt of **ARY-0484-101** per treated acre on SEEDLING GRASS after the crop reaches the 3 to 5 leaf stage. Apply up to 2 pt of **ARY-0484-101** on well established perennial grass. **DO NOT APPLY AFTER THE GRASS SEED CROP BEGINS TO JOINT.** For best performance, make applications when weeds are in the 2 to 4 leaf stage and rosettes are less than 2 inches across. Use the higher level of listed rate ranges when treating more mature weeds or dense vegetative growth.

TANK MIX TREATMENTS

For control of grasses or additional broadleaf weeds, **ARY-0484-101** may be tank mixed with all broadleaf herbicides registered for use in Grass Seed Production. Read and follow the label of each tank mix product used for precautionary statements, directions for use, weeds controlled, and geographic and other restrictions.

BROADCAST RATE PER TREATED ACRE:

Apply 1/2–2 pt **ARY-0484-101** with:

Product	Active Ingredient	Formulation	Amount of Product Per Acre
2,4-D amine or ester	2,4-D	4.0 lb/gal	1.0–4.0 pt (0.5–2.0 lb ai/A) ¹
MCPA amine	MCPA	4.0 lb/gal	1.0–2.0 pt (0.5–1.0 lb ai/A) ¹
Buctril®	bromoxynil ²	2.0 lb/gal	1.0–2.0 pt
Curtail®	clopyralid + 2,4-D	2.38 lb/gal	1 3/4–4.0 pt
Karmex®	diuron ¹	80%DF	2.0–4.0 lb
Stinger®	clopyralid	3.0 lb/gal	1/4–1.0 pt

¹When using formulations other than 4 lb/gal use pounds active/acre listed.

²Herbicides with the same common name and/or different formulations may be used.

ANNUAL GRASS CONTROL

For suppression of **ANNUAL GRASS WEEDS** such as:

Brome, Downy (Cheatgrass)
Brome, Ripgut
Fescue, Rattail
Windgrass

Apply 2 pt of **ARY-0484-101** per treated acre in the fall or late summer after harvest and burning of established grass seed crops. Applications should be made immediately following the first irrigation when the soil is moist and before weeds have more than 2 leaves.

PREPLANT DIRECTIONS

(POST HARVEST/ FALLOW/CROP STUBBLE/SET-A-SIDE)

FOR BROADLEAF WEED CONTROL BEFORE WHEAT, CORN, SORGHUM, SOYBEANS

IMPORTANT: Observe all precautions. Read and follow mixing and application instructions.

WEEDS CONTROLLED

ARY-0484-101 may be applied alone or in tank mix combinations with other herbicides registered for this use.

ARY-0484-101 can be applied either POST HARVEST in the fall, spring, or summer during the FALLOW period or to CROP STUBBLE/SET-A-SIDE acres. **ARY-0484-101**, when applied at the specified rates, will control many

ANNUAL broadleaf weeds, see the WEEDS CONTROLLED section under small grains. In addition, **ARY-0484-101** will control or suppress the following BIENNIAL and PERENNIAL broadleaf weeds:

Alfalfa ¹	Horsenettle, Carolina	Thistle, Milk
Artichoke, Jerusalem	Knapweed, Diffuse	Thistle, Musk
Bindweed, Field	Knapweed, Spotted	Thistle, Plumeless
Bindweed, Hedge	Nightshade, Silver	Thistle, Scotch
Blueweed, Texas	Redvine	Trumpet creeper (Buckvine)
Bursage (Bur Ragweed, Povertyweed, Lakeweed) ¹	Smartweed, Swamp	
Dandelion, Common ¹	Sowthistle, Perennial ¹	
Dock, Curly ¹	Spurge, Leafy	
Dogbone, Hemp	Thistle, Bull	
Garlic, Wild ²	Thistle, Canada ²	

¹ These perennials may be controlled using **ARY-0484-101** at rates lower than those recommended for other listed perennial weeds. (See RATES AND TIMINGS under this heading).

² See the SPECIAL TANK MIX TREATMENTS section under this heading for specific control programs for these weeds.

RATES AND TIMINGS

Apply **ARY-0484-101** as a broadcast or spot treatment to emerged and actively growing weeds after crop harvest (post-harvest) and before a killing frost or in the fallow cropland or crop stubble the following spring or summer. Agriculturally approved spray additives, such as surfactants or oils, may be used to enhance spray coverage and the herbicide's penetration of weed foliage. See CROPPING RESTRICTIONS for specified interval between application and planting to prevent crop injury.

For best performance, make application when ANNUAL weeds are less than 6 inches tall, when BIENNIAL weeds are in the rosette stage and to PERENNIAL weed regrowth in late summer or fall following a mowing or tillage treatment. Most effective control of upright PERENNIAL broadleaf weeds, such as Canada thistle and Jerusalem artichoke, occurs if application is made when the majority of weeds, such as field bindweed and hedge bindweed, are in or beyond the full bloom stage.

Avoid disturbing treated areas following application. Treatments may not kill weeds which develop from seed or underground plant parts, such as rhizomes or bulblets, after the effective period for **ARY-0484-101**. For seedling control, a follow-up program or other cultural practices could be instituted. For small grain in-crop uses of **ARY-0484-101**, see the RATES AND TIMINGS section under the SMALL GRAINS heading for details.

ARY-0484-101 RATES PER TREATED ACRE.

Weed Type	Amount of Product Per Treated Acre
Annual	1/2–1.0 pt
Biennial	1.0–2.0 pt
Perennial	
Suppression	1.0–2.0 pt (16.0–32.0 fl oz)
Control - noted (!) perennials	2.0 pt (32.0 fl oz)

Retreatments may be made as needed; however, do not exceed a total of 2 applications of **ARY-0484-101** per year.

TANK MIX TREATMENTS

ARY-0484-101 may be tank mixed with one or more of, but not limited to, the following herbicides for control of grasses or additional broadleaf weeds. Read and follow the label of each tank mix product used for precautionary statements, directions for use, rates and timings, weeds controlled, and geographic or other restrictions.

ARY-0484-101 BROADCAST RATE PER TREATED ACRE FOR ANNUAL WEED CONTROL:

Apply 1/4-1 pt **ARY-0484-101** with:

Product	Active Ingredient	Formulation	Amount of Product Per Acre
Aatrex® 4L ¹	atrazine	4.0 lb/gal	0.5–6.0 pt
Aatrex® Nine-O® ¹	atrazine	90%DF	0.5–3.3 lb
Ally® ²	metsulfuron-methyl	75%DF	0.1 oz
Amber® ²	triasulfuron	75%DF	0.28-0.35 oz
Fallow Master	Glyphosate + dicamba	2.0 lb/gal	22–44 fl oz
Gramoxone® Extra	paraquat	2.5 lb/gal	1.5 pt
Kerb® ¹	pronamide	50-W	0.5–1.0 lb
Landmaster® BW	glyphosate + 2,4-D	2.4 lb/gal	27.0–54.0 fl oz
Roundup	glyphosate	3.0 lb/gal	8.0–48.0 fl oz
Sencor® DF ¹	metribuzin	75%DF	0.5–1.0 lb
Sencor® 4 ¹	metribuzin	4.0 lb/gal	0.75–1 1/2 pt
2,4-D	2,4-D	4.0 lb/gal	1.0–2.0 pt (0.5–1.0 lb ai/A) ³

¹Tank mixes of **ARY-0484-101** with these products may be subject to special restrictions. See the product label of the tank mix partner for intended use rates, restrictions. See the product label of the tank mix partner for intended use rates, restrictions, and other precautions.

² When tank mixing with sulfonylurea herbicides refer to the product label for rates and restrictions. Use a surfactant of at least 80% active ingredient at the rate of 1 to 2 qt/100 gal of spray or not more than 0.25 to 0.5% by volume. Use the highest rate of surfactant when using the lower rate ranges of the tank mix and/or when treating more mature weeds or dense vegetative growth. Sulfonylurea resistant weeds may not be controlled by tank mixes of **ARY-0484-101** and a sulfonylurea, refer to the **ARY-0484-101** tank mix section for alternative tank mixes.

³ When using formulations other than 4 lb/gal use pounds active/acre listed.

ARY-0484-101 BROADCAST RATE PER TREATED ACRE FOR BIENNIAL AND PERENNIAL WEED CONTROL:

Apply 1–2 pt of **ARY-0484-101** with:

Product	Active Ingredient	Formulation	Amount of Product Per Acre
Curtail®	clopyralid +2,4-D	2.38 lb/gal	2.0–4.0 pt
2,4-D	2,4-D	4.0 lb/gal	2.0–6.0 pt (1.0–3.0 lb ai/A) ¹
Landmaster® BW	glyphosate +2,4-D	2.4 lb/gal	54.0 fl oz
Roundup®	glyphosate	3.0 lb/gal	1.0–5.0 qt
Tordon® 22K	picloram	2.0 lb/gal	1/2–1.0 pt

¹When using formulations other than 4 lb/gal use pounds active/acre listed.

SPECIAL TANK MIX TREATMENTS

For suppression of PERENNIAL weeds, apply 1/2–1 pt of **ARY-0484-101** with 8–16 fl oz of Roundup Herbicide or Roundup TR per treated acre.

For wild garlic control, apply 1 pt **ARY-0484-101** with 3 pt of 2,4-D LV ester (4 lb/gal) per treated acre. Apply when wild garlic is 4 to 8 inches tall.

For Canada thistle control, use **ARY-0484-101**, **ARY-0484-101** plus Curtail, or **ARY-0484-101** plus Roundup herbicide tank mix treatments.

Application may be made during fallow periods for control of volunteer barley, bulbous bluegrass, downy brome, jointed goatgrass, common rye, and volunteer wheat when they are actively growing. Use 1 pt **ARY-0484-101** with 1/2–1 lb Kerb 50-W. Fall seeded wheat may be planted 9 months or more after application. For best performance, make application between mid-October and mid-December, prior to soil freeze up.

During fallow periods, apply **ARY-0484-101** plus Landmaster BW or Fallow Master Herbicide to give improved control of kochia, wild buckwheat, prickly lettuce, field bindweed, and Canada thistle. Use 1/8–1/4 pt of **ARY-0484-101** plus 22–54 fl oz of Landmaster BW or Fallow Master Herbicide for annual weed control or 1/4–1/2 pt **ARY-0484-101** plus 22–54 fl oz of Landmaster BW or Fallow Master Herbicide for perennial weed suppression.

CROPPING RESTRICTIONS

The following recommendations are based on **ARY-0484-101** use rates up to 2 pt per treated acre. CORN, SORGHUM, and SOYBEANS may be planted in the spring following applications made during the previous year. If less than 1 inch of rainfall occurs between application and the first killing frost, treated areas should be cultivated to allow herbicide to come in contact with moist soil. Cultivation may take place before or immediately after ground thaw.

Soybean injury may occur if the interval between application and planting is less than specified. In areas with greater than 30 inches of rainfall, delay planting for 30 days per pint of **ARY-0484-101** herbicide per treated acre. In areas with less than 30 inches of rainfall, delay planting for 45 days per pint of **ARY-0484-101** per treated acre. Exclude days when ground is frozen.

WHEAT may be planted in the fall or spring following applications. Also, spot applications may be made any time prior to crop emergence if crop injury can be tolerated in treated areas. Wheat injury may occur if the interval between application and planting is less than specified.

East of the Mississippi River, the interval is 20 days per pt of **ARY-0484-101** per treated acre or 1.25 days per 1 fl oz. Moisture is essential for **ARY-0484-101** per treated acre or 3 days per fl oz. Moisture is essential for **ARY-0484-101** degradation. Exclude days when ground is frozen.

West of the Mississippi River, the interval is 45 days per pt of **ARY-0484-101** per treated acre or 3 days per oz. Moisture is essential for **ARY-0484-101** degradation. Exclude days when ground is frozen.

Following a normal harvest of barley, oats, or wheat, any rotational crop may be planted. If the interval before harvest is shortened, such as when cover crops will be plowed under, do not follow up with the planting of a sensitive crop.

CONTROL OF PERENNIAL BROADLEAF WEEDS IN CROPLAND

(SPOT APPLICATION ONLY)

FOR USE ONLY IN THE STATES OF IDAHO, MONTANA, NEVADA, OREGON, UTAH, AND WASHINGTON

IMPORTANT: Observe all PRECAUTIONS read and follow MIXING, APPLICATION and CLEANING instructions.

Do not treat sub-irrigated cropland or areas where the soil remains saturated with water throughout the year.

Make only one application of **ARY-0484-101** per year.

Spot Application is defined as an area no greater than 1,000 ft sq per acre.

WEEDS CONTROLLED

ARY-0484-101, when applied at specified rates, will control many broadleaf weeds including:

Bindweed, Field	Dock, Broadleaf (Bitterdock)	Dock, Curly	Knopweed, Black	Knopweed, Russian
Ragwort, Tansy	Spurge, Leafy	Thistle, Canada		

RATES AND TIMINGS

ARY-0484-101 may be applied at any time following a crop harvest to stubble fallow or other cropland. Application should be made when weeds are actively growing and prior to a killing frost.

Apply 1 qt (1 lb ai) of **ARY-0484-101** per treated acre. Application may be made up to one month prior to the planting of wheat.

NOTE: DO NOT use unless injury to wheat or rotated barley will be acceptable.

Barley, oats, corn, sorghum [milo], annual or perennial grass crops may be planted into treated areas one year after application. Crops grown for seed (other than perennial grass seed) should not be planted into treated areas until three years after application. Do not plant broadleaf crops such as alfalfa, beans, peas, potatoes, or sugarbeets into treated areas until two years after application.

In most cases, treatments will not kill perennial weed seedlings which germinate from seed one or two years after treatment. Once the effect of the chemical has been lost, a follow-up program for seedling control or other cultural practices should be instituted.

WIPER APPLICATION USES

IMPORTANT: Observe all PRECAUTIONS and read and follow MIXING, APPLICATION and CLEANING instructions.

ARY-0484-101 may be applied through wiper application equipment to control or suppress actively growing broadleaf weeds, brush and vines. Use a solution contain 1 part **ARY-0484-101** to 1 part water. **DO NOT** contact desirable vegetation with herbicide solution. Wiper application should only be made to crops (including pastures) and non-cropland areas described in this label with the exception of grain sorghum (milo).

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

PESTICIDE STORAGE: Store product in original container only. Do not contaminate water, other pesticides, fertilizer, food or feed in storage. Store in a well-ventilated area.

PESTICIDE DISPOSAL: Pesticide spray mixture or rinsate that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticides. Improper disposal of excess pesticide spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by the use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER HANDLING:

(Nonrefillable container 5 gallons or less).

Nonrefillable container. Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in the container. Contact your State regulatory agency to determine allowable practices in your state. ▼

Residue Removal: Triple rinse or pressure rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank, or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Offer for recycling if available or dispose of in trash or in a sanitary landfill.

Pressure rinse as follows: Empty the remaining contents into application equipment or mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank, or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Offer for recycling if available or dispose of in trash or in a sanitary landfill.

(Nonrefillable container greater than 5 gallons or 50 lb)

Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple Rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least on complete revolutions, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Offer for recycling if available or dispose of in trash or in a sanitary landfill.

FOR CHEMICAL EMERGENCY: Spill, leak, fire, exposure, or accident, call CHEMTREC: 1-800-424-9300 or 1-703-527-3887.

Deleted: Offer for recycling, if available.

Deleted: (Refillable containers up to 250 gallons or less): This is a refillable container. If the container is to be refilled, do not rinse with any material or introduce any pesticide other than this product. Reseal and return the container to the point of purchase or to a designated location named at the time of purchase of the product. DO NOT REUSE THE CONTAINER FOR ANY OTHER PURPOSE. If not returned to the point of purchase or to a designated location, triple rinse emptied container and offer for recycling. Disposal of this container must be in compliance with state and local regulations.¶

Deleted: Empty the rinsate into application equipment onto its other end and tip it back and forth several times.

Warranty and Disclaimer Statement

The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Such risks may arise from weather conditions, soil factors, off-target movement, unconventional farming techniques, the presence of other materials, the manner of use or application, or other unknown factors, all of which are beyond the control of Arysta LifeScience North America, LLC ("Arysta"), and can cause crop injury, injury to non-target crops or plants, ineffectiveness of the product, or other unintended consequences. All such risks shall be assumed by the user or buyer. Arysta warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks described above, when used in accordance with the Directions for Use under normal conditions. This warranty does not extend to the use of this product contrary to label instructions or under conditions not reasonably foreseeable to Arysta, and is subject to the inherent risks described above.

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ARY-0484-101 (MASTER) 05/21/14, Notification 01/16/15, [Resubmit 03/24/15](#)